

WHAT IS CLAIMED IS:

1. A service processor for a computer system that includes a host processor and the service processor, the service processor including a management interface
5 including a first port forming an external user interface and a second port forming an internal console interface, the service processor being operable to provide system management functions within the computer system and further being responsive to external mode switching commands received via the user interface to operate one of a management mode in which commands received
10 via the user interface are processed by the service processor and a console mode in which commands received via the user interface are passed by the service processor to the console interface for processing by the host processor.
2. The service processor of claim 1, comprising a microcontroller including the
15 first and second ports and control logic for implementing internal switching between the management and console modes.
3. The service processor of claim 2, wherein the logic comprises microcode operable to provide the internal switching between the management and console
20 modes.
4. The service processor of claim 3, comprising internal memory holding generic microcode for controlling the operation of the microcontroller.
- 25 5. The service processor of claim 4, wherein the internal memory comprises flash memory.
6. The service processor of claim 3, further comprising external memory holding application specific information for supplementing the generic microcode.

7. The service processor of claim 6, wherein the external memory comprises an electrically erasable programmable read only memory.
8. The service processor claim 2, wherein the control logic is operable to monitor signals received at the first port and to respond to a console mode switching command by operating in the console mode and to respond to a management mode switching command by operating in the management mode.
9. The service processor of claim 1, wherein the first port provides a first serial interface and the second port provides a second serial interface.
10. The service processor of claim 1, wherein the first port includes a first UART and the second port includes a second UART.
11. A computer system comprising a host processor and a service processor, the service processor including a management interface including a first port forming an external user interface and a second port forming an internal console interface, the service processor being operable to provide system management functions within the computer system and further being responsive to external mode switching commands received via the user interface to operate one of a management mode in which commands received via the user interface are processed by the service processor and a console mode in which commands received via the user interface are passed by the service processor to the console interface for processing by the host processor.
12. The computer system of claim 11, wherein the first port is connected directly via a port transceiver to an external serial interface connector of the computer system.

13. The computer system of claim 11, wherein the second port is connected via a bus bridge to the host processor.
14. The computer system claim 11, wherein the computer system is a computer
5 server.
15. The computer system of claim 11, wherein the service processor provides at least one of the following internal computer system functions: power management control; environmental monitoring; fan control; voltage rail monitoring; and system status monitoring.
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16. A method of providing external system management and console monitoring services in a computer system that includes a host processor, the method comprising: receiving external commands at a first port of a service processor in
15 the computer system, the service processor providing management functions within the computer system and further including a second port, the first port forming an external user interface for the service processor and the second port forming an internal console interface; responding to a management mode switching command received via the user interface by operating in a management mode in which commands received via the user interface are
20 processed by the service processor; and responding to a console mode switching command received via the user interface by operating in a console mode in which commands received via the user interface are passed by the service processor to the console interface for processing by the host processor.
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17. The method of claim 16, wherein the first and second ports are respective ports of a microcontroller.
18. The method claim 16, wherein signals received from the user interface are
30 buffered in a buffer, and wherein, in the console mode, the buffer is monitored

for signals representative of an access sequence forming the management mode switching command.

19. A method of providing external system management and console monitoring services in a computer system that includes a host processor and a service processor, the service processor providing management functions within the computer system and including a first port forming an external user interface for the service processor and the second port forming an internal console interface, the method comprising:
 - 5 - operating in a console mode in which commands received via the user interface are passed by the service processor to the console interface for processing by the host processor;
 - receiving signals from the user interface;
 - determining from the received signals if an access sequence has been received;
 - 15 - on receipt of an access signal, switching from the console mode to a management mode in which commands received via the user interface are processed by the service processor;
 - operating in the management mode; and
 - switching back to the console mode in response to a predetermined event.
20. The method of claim 19, wherein the first and second ports are respective ports of a microcontroller.
21. The method of claim 19, wherein signals received from the user interface are buffered in a buffer, and wherein, in the console mode, the buffer is monitored for signals representative of an access sequence forming the management mode switching command.